Claims

1.   A switching device for controlling at least two motors, comprising a converter that is connected to the motor via control and feedback lines, characterized in that the motors (M) have correlated therewith a single converter (1, 1') to which is connected at least one logic module (6, 6') that evaluates signals received from the converter (1, 1') and generates a control signal with which the desired motor (M) is controllable.

2.   The switching device according to claim 1, characterized in that the converter (1) has an interface (4) for selecting the motor (M) to be controlled, wherein the interface is connected via the signal line/s (5) to the logic module (6).

3.   The switching device according to claim 1 or 2, characterized in that by means of the switching signal of the logic module (6, 6') at least two switches (3, 7; 3', 7') are switchable, with which the power lines and the feedback lines (3, 8; 3',5') of the motor (M) to be controlled, respectively, can be switched on.

4.   The switching device according to claim 3, characterized in that the switches (3, 7; 3', 7') are configured as a multiplexer.

5.   The switching device according to claim 3 or 4, characterized in that the two switches (3, 7; 3', 7') can be switched simultaneously.

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6. The switching device according to one of the claims 1 to 5, characterized in that the feedback line (5') is a bidirectional line.

7. The switching device according to claim 6, characterized in that via the bidirectional feedback line (5') the signals are delivered from the converter (1') to the logic module (6').

8. The switching device according to one of the claims 1 to 7, characterized in that, in the case of feedback systems that cannot measure absolute values, the actual position values of the motors (M) can be stored in the logic module (6, 6').

9. The switching device according to one of the claims 1 to 8, characterized in that the logic module (6, 6') is a part of a changeover module (9, 9 ').

10. The switching device according to claim 9, characterized in that the changeover module (9, 9') has power switches (3, 3') for the motors (M).

11. The switching device according to claim 9, characterized in that the power switches (3, 3') of the motors (M) are arranged outside of the changeover module (9, 9').

12. The switching device according to claim 11, characterized in that the power switches (3, 3') of the motors (M) can be controlled by the changeover module (9, 9').

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13. The switching device according to one of the claims 1 to 12, characterized in that the converter (1, 1') is provided with an operations software enabling an administration, an actual value acquisition, and a control of several different sequentially operated positioning axes.

14. A converter, in particular, for a switching device according to one of the claims 1 through 13, characterized in that the converter (1, 1') is provided with an operations software enabling administration, actual value acquisition, and control of several different sequentially operated positioning axes.

15. A switching device for controlling at least two motors, comprising a converter connected to the motor, characterized in that the motors (14-1 ... 14-N) have correlated therewith a single converter (1) having arranged downstream thereof a multiplexer (7).

16. The switching device according to claim 15, characterized in that a decoder (15) analyzes data signals of the converter (1) and, based thereon, for certain bit patterns, generates N signals (16) for controlling the multiplexer (7) and the signal direction of bidirectional drivers (14b, 24b).

17. The device according to claim 15 or 16, characterized in that the multiplexer (7) switches N bidirectional data lines (18-1 to 18-N).

18. The device according to one of the claims 15 to 17, characterized in that, when using interfaces with a CLOCK signal, the

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correlated drivers (11a) can be deactivated for all inactive interfaces by the signal "output enable" OE (12).

19. The device according to one of the claims 15 to 18, characterized in that the decoder (15) generates additional signals (13) that can be independent of the control of the multiplexer (7).

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